



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/605,189

09/12/2003

Gregor P. Freund

VIV/0011.01

2188

28653

7590

10/16/2006

JOHN A. SMART

708 BLOSSOM HILL RD., #201

LOS GATOS, CA 95032

EXAMINER

HA, LEYNNA A

ART UNIT

PAPER NUMBER

2135

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,189

Applicant(s)

FREUND, GREGOR P.

Examiner

LEYNNA T. HA

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/22/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-47 have been examined and are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- ✓
2. **Claims 1-⁴⁷~~24~~ are rejected under 35 U.S.C. 102(e) as being anticipated by Andrews (US 6,574,736).**

As per claim 1:

Andrews discloses a method for controlling interprocess communication, the method comprising:

defining rules indicating which system services a given application can invoke; **(col.9, lines 34-38 and 49-55)**

trapping an attempt by a particular application to invoke a particular system service; **(col.15, lines 20-22 and col.21, lines 35-37)**

identifying the particular application that is attempting to invoke the particular system service; and **(col.20, lines 15-16 and col.22, lines 13-18 and 30-32)**

based on identity of the particular application and on the rules indicating which system services a given application can invoke **(col.14, lines 56-59)**, blocking the attempt when the rules indicate that the particular application cannot invoke the particular system service. **(col.22, lines 1-9)**

As per claim 2: See col.15, lines 20-21; discussing the method of claim 1, wherein said trapping step includes intercepting operating system calls for invoking the particular system service.

As per claim 3: See col.15, lines 20-21; discussing the method of claim 1, wherein said trapping step includes intercepting local procedure calls for invoking the particular system service.

As per claim 4: See col.16, lines 65-67 and col.21, lines 35-37; discussing the method of claim 1, wherein said trapping step includes intercepting an attempt to open a communication channel to the particular system service.

As per claim 5: See col.16, lines 17-31; discussing the method of claim 1, wherein said trapping step includes rerouting an attempt to invoke the particular system service from a system dispatch table to an interprocess communication controller for determining whether to block the attempt based on the rules.

As per claim 6: See col.8, lines 56-64; discussing the method of claim 5, wherein said step of rerouting attempts to invoke the particular system service from a dispatch table to the interprocess communication controller includes replacing an original destination address in the system dispatch table with an address of the interprocess communication controller.

As per claim 7: See col.8, lines 58-59; discussing the method of claim 6, further comprising the steps of: retaining the original destination address; and using the original destination address for invoking the particular system service if the interprocess communication controller determines not to block the attempt.

As per claim 8: See col.9, lines 34-36; discussing the method of claim 1, wherein the rules specifying which system services a given application can invoke are established based on user input.

As per claim 9: See col.14, line 53 – col.15, line 3; discussing the method of claim 1, wherein the step of blocking the attempt is based upon consulting a rules engine for determining whether the particular application can invoke the particular system service.

As per claim 10: See col.22, lines 1-9; discussing the method of claim 1, wherein the step of blocking the attempt includes obtaining user input as to whether the particular application can invoke the particular system service.

As per claim 11: See col.15, lines 20-30 and col.23, lines 7-14; discussing the method of claim 10, wherein said step of obtaining user input as to

whether the particular application can invoke the particular system service includes the substeps of: providing information to the user about the particular application that is attempting to invoke the particular system service; and receiving user input as to whether the particular application should be blocked from invoking the particular system service.

As per claim 12: See col.2, lines 47-49; discussing the computer-readable medium having computer-executable instructions for performing the method of claim 1.

As per claim 13: See col.1, lines 10-30; discussing the downloadable set of computer-executable instructions for performing the method of claim 1.

As per claim 14:

Andrews discloses in a computer system, a method for regulating communications between processes, the method comprising:

defining a policy specifying whether one process may communicate with another process; **(col.9, lines 34-38 and 49-55)**

intercepting an attempt by a first process to communicate with a second process; **(col.15, lines 20-22 and col.21, lines 35-37)**

identifying the first process that is attempting to communicate with the second process; **(col.20, lines 33-57 and col.22, lines 1-3)**

identifying the second process; **(col.13, lines 2-3 and col.21, lines 49-67)**

based on said policy, determining whether the first process may communicate with the second process; and **(col.14, lines 56-59 and col.22, lines 13-18 and 30-32)**

allowing the first process to communicate with the second process if said policy indicates that the first process may communicate with the second process. **(col.22, lines 25-57)**

As per claim 15: See col.2, lines 55-57; discussing the method of claim 14, wherein the first process comprises an instance of an application program.

As per claim 16: See col.2, lines 55-57; discussing the method of claim 14, wherein the second process comprises a system service.

As per claim 17: See col.15, lines 20-22 and col.21, lines 35-37; discussing the method of claim 14, wherein said intercepting step includes intercepting operating system calls made by the first process to attempt to communicate with the second process.

As per claim 18: See col.15, lines 20-21; discussing the method of claim 14, wherein said intercepting step includes detecting local procedure calls.

As per claim 19: See col.16, lines 65-67 and col.21, lines 35-37; discussing the method of claim 14, wherein said intercepting step includes detecting an attempt by the first process to open a communication channel to the second process.

As per claim 20: See col.col.15, lines 34-40 and col.16, lines 17-31; discussing the method of claim 14, wherein said intercepting step includes

rerouting attempts by the first process to communicate with the second process from a system dispatch table to an interprocess communication controller.

As per claim 21: See col.20, lines 33-57 and col.22, lines 1-3; discussing the method of claim 14, wherein said step of identifying the second process includes evaluating parameters of the attempt made by the first process to communicate with the second process.

As per claim 22: See col.8, lines 55-66 and col.9, lines 50-55; discussing the method of claim 14, wherein said policy specifies particular processes to be protected from communications made by other processes.

As per claim 23: See col.1, lines 42-52 and col.22, lines 25-57; discussing the method of claim 14, further comprising: providing for a process to be registered in order to be protected from communications made by other processes; and determining whether to allow the first process to communicate with the second process based, at least in part, upon determining whether the second process is registered.

As per claim 24: See col.7, lines 35-47; discussing the method of claim 23, wherein said determining step is based, at least in part, on the type of communication the first process is attempting with the second process.

As per claim 25:

Andrews discloses a method for controlling interprocess communications from one application to another, the method comprising:

registering a first application to be protected from other applications;
(col.12, lines 35-67)

detecting an attempt to access the first application using interprocess communication; **(col.20, lines 33-57 and col.22, lines 1-3)**

identifying a second application that is attempting to access the first application using interprocess communication; and **(col.13, lines 2-3 and col.21, lines 49-67)**

rerouting the attempt to access the first application through an interprocess communication controller that determines whether to allow the attempt, based on rules indicating whether the second application may access the first application using interprocess communication. **(col.6, lines 42-43 and col.22, lines 25-57)**

As per claim 26: See col.16 lines 1-8; discussing the method of claim 25, wherein said registering step includes supplying rules specifying particular communications from which the first application is to be protected.

As per claim 27: See col.15, lines 35-41 and col.22, lines 25-57; discussing the method of claim 26, wherein the interprocess communication controller determines whether to allow the attempt based, at least in part, upon the rules specifying particular communications from which the first application is to be protected.

As per claim 28: See col.15, lines 20-22 and col.21, lines 35-37; discussing the method of claim 25, wherein said detecting step includes

intercepting operating system calls for accessing the first application.

As per claim 29: See col.10, lines 55-56; discussing the method of claim 25, wherein said detecting step includes detecting a graphical device interface (GDI) message sent to the first application.

As per claim 30: See col.20, lines 33-57 and col.22, lines 1-3; discussing the method of claim 29, wherein said identifying step includes evaluating parameters of the message sent to the first application.

As per claim 31: See col.7, lines 23-24; discussing the method of claim 25, wherein said detecting step includes detecting an attempt to send keystroke data to a window of the first application.

As per claim 32: See col.7, lines 23-25; discussing the method of claim 25, wherein said detecting step includes detecting an attempt to send mouse movement data to a window of the first application.

As per claim 33: See col.15, lines 35-41 and col.22, lines 25-57; discussing the method of claim 25, wherein said rerouting step includes rerouting the attempt to access the first application from a system dispatch table to the interprocess communication controller.

As per claim 34: See col.16, line 65-col.17, line 5; discussing the method of claim 25, wherein said rules indicating whether the second application may access the first application includes rules indicating particular types of communications which are allowed.

As per claim 35: See col.15, lines 35-41 and col.22, lines 25-57;

discussing the method of claim 25, further comprising: if the interprocess communication controller allows the attempt to access the first application, routing the attempt to the first application.

As per claim 36:

Andrews discloses a system for regulating interprocess communication between applications, the system comprising:

a policy specifying applications (**col.9, lines 34-38 and 49-55**) that are permitted to communicate with a first application using interprocess communication; (**col.20, lines 33-57 and col.22, lines 1-3**)

a module for detecting a second application attempting to communicate with the first application using interprocess communication; and (**col.13, lines 2-3 and col.21, lines 49-67**)

an interprocess communication controller for identifying the second application attempting to communicate with the first application and determining whether to permit the communication based upon the identification of the second application and the policy specifying applications permitted to communicate with the first application. (**col.6, lines 42-43 and col.22, lines 25-57**)

As per claim 37: See **col.16 lines 1-8**; discussing the system of claim 36, wherein said policy includes rules indicating particular types of communications which are permitted.

As per claim 38: See **col.15, lines 35-41 and col.22, lines 25-57**;

Art Unit: 2135

discussing the system of claim 36, further comprising: a rules engine for specifying applications that are permitted to communicate with the first application using interprocess communication.

As per claim 39: See col.12, lines 35-67; discussing the system of claim 36, further comprising: a registration module for establishing said policy.

As per claim 40: See col.12, lines 35-67; discussing the system of claim 39, wherein said registration module provides for identifying applications to be governed by said policy.

As per claim 41: See col.16, line 65-col.17, line 5; discussing the system of claim 36, wherein said module for detecting a second application detects an operating system call to open a communication channel to the first application.

As per claim 42: See col.10, lines 55-56; discussing the system of claim 36, wherein said module for detecting a second application detects a graphical device interface (GDI) message sent to the first application.

As per claim 43: See col.13, lines 2-3 and col.21, lines 49-67; discussing the system of claim 36, wherein said module for detecting a second application detects a local procedure call attempting to access the first application.

As per claim 44: See col.15, lines 35-41 and col.22, lines 25-57; discussing the system of claim 36, wherein said module for detecting a second application redirects attempts to communicate with the first application to the interprocess communication controller.

As per claim 45: See col.15, lines 35-41 and col.22, lines 25-57;

discussing the system of claim 36, wherein said module for detecting a second application reroutes the attempt to communicate with the first application from a dispatch table to the interprocess communication controller.

As per claim 46: See col.15, lines 35-41 and col.22, lines 25-57;

discussing the system of claim 36, wherein said interprocess communication controller determines whether to permit the communication based, at least in part, upon evaluating parameters of the attempt made by the second application to communicate with the first application.

As per claim 47: See col.16, line 65-col.17, line 5 and col.22, lines 25-57;

discussing the system of claim 36, wherein said interprocess communication controller determines whether to permit the communication based upon obtaining user input as to whether to permit the second application to communicate with the first application.

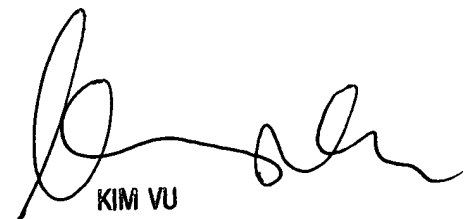
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LHa



KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100